



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,760	11/27/2000	Eduard Michel	1999DE132	4985

25255 7590 12/12/2006

CLARIANT CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
4000 MONROE ROAD
CHARLOTTE, NC 28205

EXAMINER

NOTE, JANIS L

ART UNIT PAPER NUMBER

1756

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

C

Office Action Summary	Application No. 09/722,760	Applicant(s) MICHEL ET AL.	
	Examiner Janis L. Dote	Art Unit 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-10,17 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) 4,9,10 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,4,6-10,17 and 22-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1756

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on Feb. 21, 2006, has been entered.

2. The examiner acknowledges the amendments to claims 1, 6, and 23, the cancellation of claim 5, and addition of claim 25 set forth in the amendment filed on Sep. 28, 2006. Claims 1, 4, 6-10, 17, and 22-25 are pending.

3. The "Amendment to the specification" sections and "Amendment to the claims" sections filed on Feb. 21, 2006, and on Jun. 12, 2006, did not comply with 37 CFR 1.121 for the reasons discussed in the Notices of non-compliant amendment mailed on May 10, 2005, and on Aug. 28, 2006, respectively. Accordingly, those "Amendment to the specification" sections and the "Amendment to the claims" sections filed on Feb. 21, 2006, and on Jun. 12, 2006, have not been entered.

Art Unit: 1756

4. Applicants' election of species without traverse filed on Mar. 5, 2002, has been noted. The examiner has previously acknowledged the elected species, an electrophotographic toner or developer, and the elected ultimate species of invention, distearyldimethyl ammonium bentonite in preparation example 1 on pages 30-31 of the instant specification. See the office action mailed on May 1, 2002, paragraph 2.

Pursuant to the amendments to claims 1 and 23 and the addition of new claim 25, filed on Sep. 28, 2006, instant claims 1, 6-8, and 22-25 read on the ultimate elected species.

Claims 4, 9, 10, and 17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the election filed on Mar. 5, 2002.

5. The objection to the specification set forth in the office action mailed Sep. 21, 2005, paragraph 5, has been withdrawn in response to the amended paragraph beginning at page 13, line 14, of the specification, filed on Sep. 28, 2006.

The rejection of claim 5 under 35 U.S.C. 112, second paragraph, and objection to claim 5, set forth in the office action mailed on Sep. 21, 2005, paragraphs 7 and 10,

Art Unit: 1756

respectively, have been mooted by the cancellation of claim 5 set forth in the amendment filed on Sep. 28, 2006.

The rejection of claims 1, 7, 8, and 24 [sic: 23] under 35 U.S.C. 112, first paragraph, set forth in the office action mailed on Sep. 21, 2005, paragraph 9, has been withdrawn in response to the amendments to claims 1 and 23 filed on Sep. 28, 2006.

The rejections of claims 1, 7, 8, 23, and 24 under 35 U.S.C. 103(a) over Canadian Patent 2,244,367 (CA'367) and of claims 1, 7, 8, 23, and 24 under the judicially created doctrine of obviousness-type double patenting over claims 1-8 of U.S. Patent No. 6,030,738 (Michel'738), set forth in the office action mailed on Sep. 21, 2005, paragraphs 14 and 15, respectively, have been withdrawn in response to the amendments to claims 1 and 23 filed on Sep. 28, 2006. Those amendments to claims 1 and 23 require the cation to be a "nonpolymeric ammonium ion . . . of the formula (a)-(i)" recited in those claims. CA'367 does not teach or suggest the charge control agent now recited in instant claims 1 and 23. Nor do the claims of Michel'738 recite the charge control agent recited in instant claims 1 and 23.

Art Unit: 1756

6. Applicants are advised that should claim 1 be found allowable, claims 23 and 25 will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 6-8, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 23, and 25 are indefinite in the phrase "the low molecular weight, nonpolymeric ammonium ion is of the formula [sic] (a)-(i)" because it is not clear how the ammonium ion can be represented by all nine formulas.

Art Unit: 1756

Claim 6 is indefinite in the Markush group "R¹ to R¹⁹ denote hydrogen . . . naphthyl, C₁-C₁₂-alkylene-heterocyclyl" for improper Markush language. The group is missing the conjunction "or" between the last two members of the group. It is not clear whether the group is closed. Proper Markush language is "R is selected from the group consisting of . . . and . . ." or "R is . . . or . . ." MPEP 2173.05(h).

Claim 7 and claims 8 and 24, which depend from claim 7, are indefinite in the phrase "the low molecular weight organic cation is an ammonium ion which is an aliphatic or aromatic 5- or 12-membered heterocyclic radical with 1 to 4 atoms . . ." (emphasis added) for lack of unambiguous antecedent basis for the term "low molecular weight organic cation" in claim 1, from which claims 7, 8, and 24 depend. Claim 1 recites a "low molecular weight, nonpolymeric ammonium ion . . . of the formula (a)-(i) . . ." In addition, the low molecular weight organic cation recited in instant claims 7, 8, and 24 is outside the scope of the particular ammonium ion recited in instant claim 1 because it is broader than the ammonium ion represented by one of the formulas (a) to (i).

9. Claims 1, 23, and 25 are objected to because of the following informalities:

In claims 1 and 25, the phrase "adding as a charge control agent, wherein the charge control agent is" (emphasis added) for non-idiomatic English. The word "as" should be deleted from the phrase.

In claim 1, at line 45, and in claim 23, at line 45, the chemical formula



is missing a bond, i.e., "-" on the left side of the carbonyl group.

Appropriate correction is required.

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 1, 6-8, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 8-6295 (JP'295) combined with US 3,925,278 (Murai), US 4,992,262 (Nakagaki), and US 5,385,776 (Maxfield). See the THOMAS-DERWENT machine-assisted translation of JP'295 for cites.

JP'295 discloses a charge controlling agent composition that comprises the charge controlling quaternary ammonium salt compound (1) of Table 1 of JP'295 and organic bentonite, as an

Art Unit: 1756

"extender," in a weight ratio of 50:50. Translation, Table 1 at page 21, line 1; and paragraph 0052, charge controlling agent composition 4. JP'295 adds the charge controlling agent composition to a binder resin of a toner. See the translation, paragraph 0054. The resultant toner comprises a binder resin, a colorant, and the charge controlling agent composition comprising the organic bentonite. The resultant toner is a positively chargeable toner that shows stable electrostatic charge performances under conditions of high humidity and high temperature, as well as under low humidity and low temperature. See the translation, Table 2, paragraph 0060, lines 1-11, and paragraph 0061. JP'295 discloses that when the extender in the charge controlling agent composition is not the organic bentonite, but aluminum hydroxide, the electrostatic charge performance of the toner comprising said charge controlling agent composition was not stable under conditions of high humidity and high temperature and of low humidity and low temperature. Translation, paragraph 0053, charge controlling agent constituent 5; Table 2, example 5; and paragraph 0060, lines 1-11. Thus, the addition of organic bentonite in the JP'295 charge controlling agent composition helps to "control" or "improve" the charge of an electrophotographic toner and developer, which are the results sought by the method recited in

Art Unit: 1756

instant claims 1, 23, and 25, "[a] method of . . . controlling or improving the charge of an electrophotographic toner or developer . . .".

JP'295 does not identify the organic bentonite as distearyldimethyl ammonium bentonite as recited in instant claim 22. However, the term "organic bentonite" is usually defined as a bentonite impregnated with a cationic organic compound, such as a quaternary ammonium salt, e.g., dimethyloctadecylammonium bentonite. Murai, col. 1, lines 35-38. Nakagaki discloses that commercially available organic bentonites include BENTONE 27, BENTONE 34, and BENTONE 38. Nakagaki, col. 3, lines 27-29. Maxfield identifies BENTONE-34 as a montmorillonite whose native interlayer cations were ion-exchanged for dimethyldioctadecylammonium cation, which is another name for distearyldimethyl ammonium bentonite. Maxfield, col. 13, line 34, to col. 14, line 3. BENTONE-34 therefore meets the compositional limitation of "distearyldimethyl ammonium bentonite" as recited in instant claim 22. BENTONE 34 also meets the compositional limitation of the structured silicate salt comprising a low molecular weight, nonpolymeric ammonium cation, as recited in instant claims 1, 6-8, and 23-25.

Neither JP'295 nor the other cited references identify organic bentonite or BENTONE 34 as a charge control agent as recited in the instant claims. However, as discussed above, JP'295 shows that the addition of organic bentonite to its charge controlling agent composition improves or controls the charge of the toner. Furthermore, BENTONE 34 meets the compositional limitation of "distearyldimethyl ammonium bentonite" as recited in instant claim 22 and the compositional limitation of the structured silicate salt containing a low molecular weight ammonium ion as recited in instant claims 1, 6-8, and 23-25. Thus, it is reasonable to presume that BENTONE 34 has the charge controlling properties recited in the instant claims, and is therefore "a charge control agent." The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of Murai, Nakagaki, and Maxfield, to use the readily commercially available organic bentonite BENTONE 34 as the organic bentonite in the charge controlling agent composition disclosed by JP'295, and to add the resultant charge controlling agent composition to the toner binder resin to form a toner as disclosed by JP'295. That person would have had a reasonable expectation of successfully

Art Unit: 1756

obtaining a method that provides an electrophotographic toner having stable electrostatic charge performances under conditions of high-humidity and high-temperature, as well as under low-humidity and low temperature, as taught by JP'295.

The recitations that the structured silicate salt is added as a charge control agent in claims 1, 6-8, and 23-25, and that distearyldimethyl ammonium bentonite is added as a charge control agent in claim 22 do not result in a manipulative difference between the method recited in the instant claims and the method rendered obvious over the prior art. They are merely recitations of intended use that appear to be fully met by the references. Thus, the recitations do not distinguish the method recited in the instant claims from the method rendered obvious over the combined teachings of the prior art.

12. Applicants' arguments filed on Feb. 21, 2006, with respect to the rejection set forth in paragraph 11 above have been fully considered but they are not persuasive for the following reasons.

Applicants assert that "[t]here is nothing in the prior art that teaches, suggests, discloses or intimates the method that Applicants are herein claiming, namely, that a structured silicate salt can act as a charge controlling agent." Applicants

Art Unit: 1756

assert that "JP'295 can not provide this teaching as such reference implicitly states that the silicate salt does not act as a charge controlling agent by the mere fact that JP reference disclose that the charge control agent is a quaternary ammonium salt compound, and no other."

However, as discussed in paragraph 11 above, JP'295 shows that the addition of organic bentonite to its charge controlling agent composition improves or controls the charge of the toner. BENTONE 34 meets the compositional limitation of "distearyldimethyl ammonium bentonite" recited in instant claim 22, and meets the compositional limitations of the "structured silicate salt" recited in instant claims 1, 6-8, and 23-25. BENTONE 34 is not "structurally similar" to distearyldimethyl ammonium bentonite: it is that species. "A chemical composition and its properties are inseparable." Thus, as stated in the rejection above, "it is reasonable to presume that BENTONE 34 has the charge controlling properties recited in the instant claims."

Applicants further assert that "there is no requirement that in a method claim there must be a manipulative step that is different from the prior art for such method to be patentable over the prior art." Applicants assert that the instantly claimed method is not obvious over the prior art because the

Art Unit: 1756

prior art does not recognize or teach that a structured silicate salt can be used as a charge control agent. Applicants assert "using the Office's language, the 'manipulative' difference as compared to the prior art, is the method claimed herein uses a structured silicate salt as an effective charge control agent."

However, the instant claims merely recite adding a compound, i.e., "structured silicate" or distearyldimethyl ammonium bentonite to a toner binder resin. As discussed in paragraph 11 above, the combined teachings of the prior art render obvious a method of adding a charge agent composition that comprises an ammonium quaternary compound and BENTONE 34 to a toner binder resin to impart, improve, and control the charge of the toner. That method adds BENTONE 34 to a toner binder resin. Thus, that method meets the addition step recited in the instant claims. Accordingly, as discussed in paragraph 11 above, the recitations that the structured silicate salt is added as a charge control agent in claims 1, 6-8, and 23-25, and that distearyldimethyl ammonium bentonite is added as a charge control agent in claim 22 do not result in a manipulative difference between the step recited in the instant claims and the step rendered obvious over the combined teachings of the prior art. Unless the intended use results in a manipulative difference as compared to the prior art, a claim drawn to a

Art Unit: 1756

process of making is fully met by a reference teaching the same step, but not reciting the same intended use. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Moreover, as discussed in paragraph 11 above, JP'295 discloses that the addition of the extender organic bentonite in its charge controlling agent composition improves or controls the charge of the toner. Thus, a person having ordinary skill in the art would have had a reasonable expectation of successfully controlling or improving the charge characteristics of a toner when using the JP'295 charge controlling composition comprising the JP'295 quaternary ammonium charge control agent and an organic bentonite as the extender in the charge controlling composition disclosed by JP'254.

Applicants further argue that the showing in the Rule 132 declaration, which was executed by Eduard Michael on Nov. 1, 2004, filed on Feb. 9, 2005, clearly shows that the claimed invention provides unexpected results over the prior art.

However, the showing in the declaration is insufficient to show that the claimed invention provides unexpected results over the prior art because the declaration has not compared to the closest prior art. The examples labeled of the prior art do not appear to be a probative comparison to the teachings of JP'295.

Art Unit: 1756

charge controlling composition 4 in JP'295 is obtained by adding an organic bentonite having an average particle size of 0.5 micrometers to the purified quaternary ammonium salt of formula (1) shown in Table 1 of JP'295, and pulverizing the mixture to obtain a "homogeneous composition." See the translation, paragraph 0030, lines 11-18, and paragraph 0052. JP'295 teaches that the resultant homogeneous composition is then blended with a polyester binder resin in a HENSCHEL MIXER, kneaded in a roll mill, pulverized, and then classified to obtain toner particles. See the translation, paragraph 0054. JP'295 discloses that after mixing the toner with two different carriers, the toner had a positive "saturated electrical charge" of about 24 $\mu\text{C/g}$ under conditions of 30°C and 20% or 80% relative humidity. See Table 2, example 4. Carrier 1 comprises spherical ferrites having an average particle diameter of 100 μm coated with an acrylic resin. Carrier 2 comprises spherical ferrites having an average particle diameter of 100 μm coated with a silicone resin. See paragraphs 0055 to 0056. JP'295 teaches that "there is no difference in a saturated electrical charging amount and the electrical charging build-up property ability." Translation, paragraph 0061.

In the example labeled of JP'295 in the declaration, the toner particles are obtained by incorporating dimethyldistearyl

Art Unit: 1756

ammonium bentonite, an alkylated quaternary ammonium molybdate associated with the tradename TP-415, which is obtained from Hodogaya Chemical Co., using a kneader into a polyester binder resin; milling the kneaded mixture; and classifying the milled mixture to obtain toner particles. The example in the declaration separately adds the quaternary ammonium compound and the ammonium bentonite to the toner binder resin, instead of adding the compounds as the homogenous mixture taught by JP'295. The declaration also does not disclose that the alkylated quaternary ammonium molybdate associated with the tradename TP-415 has the same chemical composition as the quaternary ammonium salt of formula (1) shown in Table 1 of JP'295, or that it is purified. Furthermore, the declaration shows that when the toner particles are mixed with a carrier for 5 minutes, 10 minutes, 30 minutes, and 2 hours, the toner particles had a blow charge of -13, -11, -9 and -8 $\mu\text{C/g}$, respectively, under conditions of 50% relative humidity. As discussed above, JP'295 shows that when its toner comprising the homogenous mixture of its quaternary ammonium compound and organic bentonite is mixed with either of two exemplified carriers, the toner exhibits a positive "saturated electrical charging amount" of about 24 $\mu\text{C/g}$. Not only are the absolute charging amounts reported in JP'295 about two times greater than

Art Unit: 1756

those reported in the declaration, the polarity of the charging amount in the declaration is opposite to those reported in JP'295. The declaration does not show that the toner in the declaration has the charging properties disclosed by JP'295. Instant claims 1, 22, 23, and 25 do not limit the polarity of the resulting toner made by the method recited in those claims. Thus, the examples labeled of JP'295 in the declaration do not appear to be a probative comparison to JP'295. The declaration does not show that the claimed method yields unexpected results over the prior art.

In the response filed on Feb. 21, 2006, applicants assert that to the "best of Applicants' knowledge, the commercially available product 'TP-415' is di(fatty alkyl)dimethylammonium molybdate according to formula (1) in JP'295."

Applicants' assertion regarding the identity of the product "TP-415" is mere attorney argument. Applicants have not provide any creditable evidence showing that the product "TP-415" is the exemplified quaternary compound of formula (1) shown in Table 1 of JP'295. See formula (1) at page 21 of the translation. Nor have applicants shown that the product "TP-415" is "purified" as disclosed in example 4 of JP'295.

In the response, applicants further assert that the difference in charging results reported in JP'295 and in the

Art Unit: 1756

declaration is due to the "fact that JP'295 has used a different carrier." Applicants assert that "[n]either JP'295 nor the present invention is limited to a particular carrier system so it is proper to use any carrier and resin as the comparison is made in the same system."

Applicants' argument fails because they have not shown that they have properly reproduced a toner fairly representative of JP'295. Applicants did not follow the method of preparation taught by the reference, which is designed to yield a homogeneous charge controlling agent composition. Nor does it appear that applicants made a toner from the same starting materials. The origin of the charge opposite polarity and the much greater magnitude of the charge amount cannot, therefore, be determined. Applicants' inability to have "available the same carrier and resins used in the JP'295 reference" does not relieve their burden of distinguishing the claimed invention from JP'295. Such a comparison is not only probative - it is required.

Moreover, the showing in the declaration is not commensurate in scope with instant claims 1, 23, and 25. Examples 1 and 2 of the declaration only exemplify the addition of one structured silicate, dimethyldistearyl ammonium bentonite. The structured silicate recited in claims 1, 23,

Art Unit: 1756

and 25 is broader than the particular exemplified single species. The structured silicate recited in those claims encompasses a vast multitude of compounds comprising the ammonium ion and silicate broadly recited in those claims. The single exemplified species does not exemplify, nor does it permit extrapolation, to the full scope of the structured silicate recited in claims 1, 23, and 25. It is not a fair representative of the vast multitude of structured silicates recited in those claims. There is no evidence on the present record that the full scope of instant claims 1, 23, and 25 provides the charging results shown in examples 1 and 2 of the declaration. Furthermore, as discussed above, instant claims 1, 22, 23, and 25 do not limit the charge polarity of the toner made by the method recited in those claims. Thus, given the limited showing in the declaration, applicants have not satisfied their burden to show that the full scope of instant claims 1, 23, and 25 provides unexpected results over the prior art.

Accordingly, the rejection over the combined teachings of JP'295 and the other cited references stand.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L.

Art Unit: 1756

Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLD
Dec. 7, 2006

Janis L. Dote
JANIS L. DOTE
PRIMARY EXAMINER
GROUP 1500
1700